

## ***REMARKS***

This is a full and timely response to the outstanding non-final Office Action mailed September 3, 2008. Claims 1-8, 10-15, and 17-23 remain pending in the present application. Reconsideration and allowance of the application and pending claims are respectfully requested.

### **Response to Rejections of Claims under 35 U.S.C. §103**

Claims 1-23 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Elliott* (U.S. Patent Publication No. 2004/0022237). Claims 2-23 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Elliott* in view of *Dantu* (U.S. Patent No. 7,006,433).

#### **a. Claim 1**

As provided in independent claim 1, Applicant claims:

An arrangement for coupling a SCP (Signaling Control Point) to signalling transfer point (STP) nodes of a SS7 network, comprising:

*an aggregated signaling gateway arrangement (ASGA) including at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled between said SCP and a first STP node of said SS7 network, said second signaling gateway being coupled between said SCP and a second STP node of said SS7 network, said first signaling gateway and said second gateway being associated with and sharing a single SS7 point code, an SS7 point code comprising an identification code used to identify a node within an SS7 network.*

(Emphasis added).

Applicant respectfully submits that independent claim 1 is allowable for at least the reason that *Elliott* does not disclose, teach, or suggest at least "an aggregated signaling gateway arrangement (ASGA) including at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled between said SCP and a first STP node of said SS7 network, said second signaling gateway being coupled between said SCP and a second STP node of said SS7 network, said first signaling gateway and said second gateway being associated with and sharing a single

SS7 point code, an SS7 point code comprising an identification code used to identify a node within an SS7 network," as emphasized above.

For example, *Elliott* describes a packet-switched network that communicates with PSTN. See para. 0024. "In FIG. 2A, SS7 GWs 208, 210 receive signaling messages from signaling network 114 and communicate these messages to soft switch 204. Specifically, for SS7 signaled trunks, SS7 GWs 208, 210 can receive SS7 ISUP messages and transfer them to soft switch 204. SS7 GWs 208, 210 can and receive signaling messages from soft switch 204 and send SS7 ISUP messages out to signaling network 114." Para. 0595. Accordingly, *Elliott* does not disclose that a first signaling gateway and a second signaling gateway are part of an aggregated signaling gateway arrangement where the first signaling gateway is coupled between an SCP and an STP node and the second signaling gateway is coupled between the SCP and another STP node, and further where the first and second signaling gateways are associated with a single SS7 point code. For example, in FIG. 2A, SS7 gateway 208 is coupled between STP 250 and soft switch 204 and SS7 gateway 210 that is coupled between STP 252 and soft switch 204. Accordingly, SS7 gateway 210 and SS7 208 are not disclosed to be aggregated or to share the same point code. As such, *Elliott* fails to teach or suggest at least "an aggregated signaling gateway arrangement (ASGA) including at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled between said SCP and a first STP node of said SS7 network, said second signaling gateway being coupled between said SCP and a second STP node of said SS7 network, said first signaling gateway and said second gateway being associated with and sharing a single SS7 point code, an SS7 point code comprising an identification code used to identify a node within an SS7 network," as recited in claim 1.

The Office Action notes that a Soft Switch disclosed in *Elliott* may have a single Soft Switch point code. However, the Office Action fails to show that the Soft Switch disclosed in *Elliott* shares this point code with another Soft Switch. As such, *Elliott* fails to teach or suggest at least "an aggregated signaling gateway arrangement (ASGA) including at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled between said SCP and a first STP node of said SS7

network, said second signaling gateway being coupled between said SCP and a second STP node of said SS7 network, said first signaling gateway and said second gateway being associated with and sharing a single SS7 point code, an SS7 point code comprising an identification code used to identify a node within an SS7 network," as recited in claim 1. (Emphasis added).

As a result, claim 1 is patentable over *Elliott*, and the rejection of claim 1 should be withdrawn.

**b. Claims 2-7**

All of the claimed features of independent claim 1 are not taught and suggested by *Elliott*, as previously discussed. Since claims 2-7 depend from independent claim 1 and recite additional features, claims 2-7 are allowable over the cited art as a matter of law. Further, *Dantu* does not remedy the deficiencies of *Elliott* in disclosing the features of claim 1.

For example, *Dantu* describes an approach for transporting IN/AIN signaling over an IP-based network. *Dantu* discloses that "two SG nodes may be connected over an IP network to form an SG mated pair similar to the way STPs are provisioned in traditional SS7 networks (i.e., provisioning redundant pairs for increased reliability)." Col. 8, lines 59-63. It is not disclosed that each of the mated STPs is associated with or shares a single point code in *Dantu*. Further, the mated pair is not disclosed to be in an aggregated signaling gateway arrangement in the manner claimed. Since claims 2-7 depend from independent claim 1 and recite additional features, claims 2-7 are allowable over the cited art as a matter of law.

Accordingly, the rejection of claims 2-7 should be withdrawn.

**c. Claim 8**

As provided in independent claim 8, Applicant claims:

A communication network, comprising:  
a SS7 network comprising a plurality of interconnected STP (Signalling Transfer Point) nodes;  
an application server; and  
***an aggregated signaling gateway arrangement (ASGA) coupled between said application server and said SS7 network,***

*said ASGA comprising at least a first signaling gateway and a second signaling gateway, said first signaling gateway being configured to transmit and receive SS7 messages with a first STP node of said SS7 network, said second signaling gateway being configured to transmit and receive SS7 messages with a second STP node of said SS7 network, said first signaling gateway and said second signaling gateway communicating with said application server using SS7-over-IP, wherein said first signaling gateway and said second gateway are associated with and share a single SS7 point code, an SS7 point code comprising an identification code used to identify a node within an SS7 network.*

(Emphasis added).

Applicant respectfully submits that independent claim 8 is allowable for at least the reason that *Elliott* in view of *Dantu* does not disclose, teach, or suggest at least "an aggregated signaling gateway arrangement (ASGA) coupled between said application server and said SS7 network, said ASGA comprising at least a first signaling gateway and a second signaling gateway, said first signaling gateway being configured to transmit and receive SS7 messages with a first STP node of said SS7 network, said second signaling gateway being configured to transmit and receive SS7 messages with a second STP node of said SS7 network, said first signaling gateway and said second signaling gateway communicating with said application server using SS7-over-IP, wherein said first signaling gateway and said second gateway are associated with and share a single SS7 point code, an SS7 point code comprising an identification code used to identify a node within an SS7 network," as emphasized above.

For example, *Elliott* describes a packet-switched network that communicates with PSTN. See para. 0024. "In FIG. 2A, SS7 GWs 208, 210 receive signaling messages from signaling network 114 and communicate these messages to soft switch 204. Specifically, for SS7 signaled trunks, SS7 GWs 208, 210 can receive SS7 ISUP messages and transfer them to soft switch 204. SS7 GWs 208, 210 can and receive signaling messages from soft switch 204 and send SS7 ISUP messages out to signaling network 114." Para. 0595. Accordingly, *Elliott* does not disclose that a first signaling gateway and a second signaling gateway are part of an aggregated signaling gateway arrangement where the first signaling gateway is coupled between an SCP and an STP node and the second signaling gateway is coupled between the SCP and

another STP node, and further where the first and second signaling gateways are associated with a single SS7 point code. For example, in FIG. 2A, SS7 gateway 208 is coupled between STP 250 and soft switch 204 and SS7 gateway 210 that is coupled between STP 252 and soft switch 204. Accordingly, SS7 gateway 210 and SS7 208 are not disclosed to be aggregated or to share the same point code. As such, *Elliott* fails to teach or suggest at least "an aggregated signaling gateway arrangement (ASGA) coupled between said application server and said SS7 network, said ASGA comprising at least a first signaling gateway and a second signaling gateway, said first signaling gateway being configured to transmit and receive SS7 messages with a first STP node of said SS7 network, said second signaling gateway being configured to transmit and receive SS7 messages with a second STP node of said SS7 network, said first signaling gateway and said second signaling gateway communicating with said application server using SS7-over-IP, wherein said first signaling gateway and said second gateway are associated with and share a single SS7 point code, an SS7 point code comprising an identification code used to identify a node within an SS7 network," as recited in claim 8.

Further, *Dantu* describes an approach for transporting IN/AIN signaling over an IP-based network. *Dantu* discloses that "two SG nodes may be connected over an IP network to form an SG mated pair similar to the way STPs are provisioned in traditional SS7 networks (i.e., provisioning redundant pairs for increased reliability)." Col. 8, lines 59-63. It is not disclosed that each of the mated STPs is associated with or shares a single point code in *Dantu*. Further, the mated pair is not disclosed to be in an aggregated signaling gateway arrangement in the manner claimed. As such, *Dantu* individually or in combination with *Elliott* fails to teach or suggest at least "an aggregated signaling gateway arrangement (ASGA) coupled between said application server and said SS7 network, said ASGA comprising at least a first signaling gateway and a second signaling gateway, said first signaling gateway being configured to transmit and receive SS7 messages with a first STP node of said SS7 network, said second signaling gateway being configured to transmit and receive SS7 messages with a second STP node of said SS7 network, said first signaling gateway and said second signaling gateway communicating with said application server using SS7-over-IP,

wherein said first signaling gateway and said second gateway are associated with and share a single SS7 point code, an SS7 point code comprising an identification code used to identify a node within an SS7 network," as recited in claim 8.

As a result, *Elliott* in view of *Dantu* fails to establish a *prima facie* case of obviousness for claim 8, and the rejection of claim 8 should be withdrawn.

d. **Claims 9-14**

Because independent claim 8 is allowable over the cited art of record, dependent claims 10-14 (which depend from independent claim 8) are allowable as a matter of law for at least the reason that dependent claims 10-14 contain all the features of independent claim 8. For at least this reason, the rejections of claims 10-14 should be withdrawn.

Claim 9 is canceled without prejudice, waiver, or disclaimer, and therefore, the rejection to this claim is rendered moot. Applicant takes this action merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicant reserves the right to pursue the subject matter of the canceled claim in a continuing application, if Applicant so chooses, and does not intend to dedicate any of the canceled subject matter to the public.

e. **Claim 15**

As provided in independent claim 15, Applicant claims:

A method for transmitting SS7 messages between a SCP (Signaling Control Point) and a SS7 network, said SS7 network comprising a plurality of interconnected STP (Signaling Transfer Point) nodes, comprising:

*providing an aggregated signaling gateway arrangement (ASGA), said ASGA being coupled between said SCP and said SS7 network and comprising at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled with a first STP node of said SS7 network, said second signaling gateway being coupled with a second STP node of said SS7 network, wherein said first signaling gateway and said second gateway are associated with and share a single SS7 point code, an SS7 point code comprising an identification code used to identify a node within an SS7 network; and*

employing SS7-over-IP to communicate between said SCP and said first signaling gateway and said second signaling gateway.

(Emphasis added).

Applicant respectfully submits that independent claim 15 is allowable for at least the reason that *Elliott* in view of *Dantu* does not disclose, teach, or suggest at least "providing an aggregated signaling gateway arrangement (ASGA), said ASGA being coupled between said SCP and said SS7 network and comprising at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled with a first STP node of said SS7 network, said second signaling gateway being coupled with a second STP node of said SS7 network, wherein said first signaling gateway and said second gateway are associated with and share a single SS7 point code, an SS7 point code comprising an identification code used to identify a node within an SS7 network," as emphasized above.

For example, *Elliott* describes a packet-switched network that communicates with PSTN. See para. 0024. "In FIG. 2A, SS7 GWs 208, 210 receive signaling messages from signaling network 114 and communicate these messages to soft switch 204. Specifically, for SS7 signaled trunks, SS7 GWs 208, 210 can receive SS7 ISUP messages and transfer them to soft switch 204. SS7 GWs 208, 210 can and receive signaling messages from soft switch 204 and send SS7 ISUP messages out to signaling network 114." Para. 0595. Accordingly, *Elliott* does not disclose that a first signaling gateway and a second signaling gateway are part of an aggregated signaling gateway arrangement where the first signaling gateway is coupled between an SCP and an STP node and the second signaling gateway is coupled between the SCP and another STP node, and further where the first and second signaling gateways are associated with a single SS7 point code. For example, in FIG. 2A, SS7 gateway 208 is coupled between STP 250 and soft switch 204 and SS7 gateway 210 that is coupled between STP 252 and soft switch 204. Accordingly, SS7 gateway 210 and SS7 208 are not disclosed to be aggregated or to share the same point code. As such, *Elliott* fails to teach or suggest at least "providing an aggregated signaling gateway arrangement (ASGA), said ASGA being coupled between said SCP and said SS7 network and comprising at least a first signaling gateway and a second signaling

gateway, said first signaling gateway being coupled with a first STP node of said SS7 network, said second signaling gateway being coupled with a second STP node of said SS7 network, wherein said first signaling gateway and said second gateway are associated with and share a single SS7 point code, an SS7 point code comprising an identification code used to identify a node within an SS7 network," as recited in claim 15.

Further, *Dantu* describes an approach for transporting IN/AIN signaling over an IP-based network. *Dantu* discloses that "two SG nodes may be connected over an IP network to form an SG mated pair similar to the way STPs are provisioned in traditional SS7 networks (i.e., provisioning redundant pairs for increased reliability)." Col. 8, lines 59-63. It is not disclosed that each of the mated STPs is associated with or shares a single point code in *Dantu*. Further, the mated pair is not disclosed to be in an aggregated signaling gateway arrangement in the manner claimed. As such, *Dantu* individually or in combination with *Elliott* fails to teach or suggest at least "providing an aggregated signaling gateway arrangement (ASGA), said ASGA being coupled between said SCP and said SS7 network and comprising at least a first signaling gateway and a second signaling gateway, said first signaling gateway being coupled with a first STP node of said SS7 network, said second signaling gateway being coupled with a second STP node of said SS7 network, wherein said first signaling gateway and said second gateway are associated with and share a single SS7 point code, an SS7 point code comprising an identification code used to identify a node within an SS7 network," as recited in claim 15.

As a result, *Elliott* in view of *Dantu* fails to establish a *prima facie* case of obviousness for claim 15, and the rejection of claim 15 should be withdrawn.

f. **Claims 16-23**

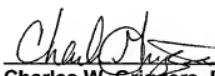
Because independent claim 15 is allowable over the cited art of record, dependent claims 17-23 (which depend from independent claim 15) are allowable as a matter of law for at least the reason that dependent claims 17-23 contain all the features of independent claim 15. For at least this reason, the rejections of claims 17-23 should be withdrawn.

Claim 16 is canceled without prejudice, waiver, or disclaimer, and therefore, the rejection to this claim is rendered moot. Applicant takes this action merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicant reserves the right to pursue the subject matter of the canceled claim in a continuing application, if Applicant so chooses, and does not intend to dedicate any of the canceled subject matter to the public.

#### **CONCLUSION**

For at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

Respectfully submitted,



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